



## March 1997

[illegible]

### **MISSION STATEMENT**

The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based upon the principles of multiple use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife, wilderness, air and scenic, scientific and cultural values.

BLM/CC/PL-97/014+1791  
Case File No. N36-86-003P









# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Carson City District Office  
1535 Hot Springs Road  
Carson City, Nevada 89706-0638  
PH: (702) 885-6100

March 7, 1997



IN REPLY REFER TO:  
3809 (NV030)  
N36-86-003P

Dear Reader:

Enclosed for your review and comment is the Final Environmental Impact Statement (FEIS) for Kennecott Rawhide Mining Company's Denton-Rawhide Mine Expansion Project prepared by the Bureau of Land Management (BLM) Carson City District Office.

The Final EIS has been prepared in an abbreviated format and must be used in conjunction with the Draft Environmental Impact Statement (DEIS) issued November 1, 1996. The FEIS and the DEIS constitute the complete EIS. In Chapter 4 the FEIS responds to the comments received during the public review period on the DEIS.

Following the 30-day availability period of this Final Environmental Impact Statement, a Record of Decision will be issued. Questions or comments should be directed to: Terri Knutson, Rawhide EIS Project Manager, Bureau of Land Management, Carson City District Office, 1535 Hot Springs Road, Carson City, Nevada 89706, or telephone at (702) 885-6156.

Sincerely,

Karl L. Kipping  
Associate District Manager  
Carson City District

Enclosure





FINAL  
ENVIRONMENTAL IMPACT STATEMENT  
DENTON-RAWHIDE MINE EXPANSION PROJECT

LEAD AGENCY: U.S. Department of the Interior  
Bureau of Land Management  
Carson City District Office  
Carson City, Nevada

PROJECT LOCATION: Mineral County, Nevada

COMMENTS ON THIS FINAL  
ENVIRONMENTAL IMPACT  
STATEMENT (FEIS)  
SHOULD BE DIRECTED TO:

Terri Knutson, EIS Project Manager  
Bureau of Land Management  
Carson City District Office  
1535 Hot Springs Road  
Carson City, NV 89706  
(702) 885-6156

DATE FINAL EIS FILED WITH  
EPA: March 7, 1997

DATE WHEN COMMENTS MUST  
BE POSTMARKED TO BLM: April 7, 1997

ABSTRACT

The Final Environmental Impact Statement (FEIS) responds to comments received by BLM during the public comment period on the Draft Environmental Impact Statement (DEIS). The DEIS analyzed potential impacts which could result from expanding mining operations at Kennecott Rawhide Mining Company's Denton-Rawhide Mine in Mineral County, Nevada. The DEIS analyzed potential impacts which could result from alternatives and mitigation measures which would be implemented to reduce or minimize impacts. The Proposed Action includes: (1) expansion of the Murray Hill pit, (2) expansion of the waste rock disposal facility, (3) construction and operation of a run-of-mine leach pad, (4) relocation of a run-on control diversion ditch, and (5) reclamation of disturbed areas. The Agency-Preferred Alternative is Alternative A. Implementation of this alternative would result in the restoration of approximately 35 additional acres of land surface in the mine pit to productive use.

Responsible Official for EIS:

Karl L. Kipping  
Karl L. Kipping  
Associate District Manager  
Carson City District

Date: 2/20/97





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**FINAL ENVIRONMENTAL IMPACT STATEMENT  
DENTON-RAWHIDE MINE EXPANSION PROJECT**

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# **CHAPTER 1**

## **INTRODUCTION**

This Final Environmental Impact Statement (FEIS) is prepared for Kennecott Rawhide Mining Company's (KRMCo) Denton-Rawhide Mine Expansion Project located in Mineral County, Nevada. The FEIS contains the Agency Preferred Alternative and a record of written and verbal comments received on the Draft Environmental Impact Statement (DEIS). The DEIS previously distributed and this document together constitute the FEIS for the Denton-Rawhide Mine Expansion Project.

The DEIS was distributed for public comment on November 1, 1996. BLM received written comments and held one open-house public meeting to receive comments during the public comment period which ended on January 3, 1997. Neither written comments nor comments received during the public meeting identified major changes or modifications to the analysis or conclusions presented in the DEIS. The DEIS has not been reprinted; therefore, this document must be read in conjunction with the DEIS. Minor revisions to the text of the DEIS are addressed in Chapter 3 of this document (Errata).

The Agency Preferred Alternative is described in Chapter 2 of this document. Chapter 3 provides specific edits or corrections to the DEIS. All comment letters received by the end of the comment period and responses to substantive comments are located in Chapter 4.





## **CHAPTER 2**

# **AGENCY PREFERRED ALTERNATIVE**

This section of the FEIS describes the Agency Preferred Alternative. The FEIS Agency Preferred Alternative is the same as that described in the DEIS; Alternative A.

### **AGENCY PREFERRED ALTERNATIVE - FEIS**

The Agency Preferred Alternative is Alternative A; Partial Backfilling of the Murray Hill Pit. Implementation of this alternative would result in backfilling specific areas within the Murray Hill pit and would restore approximately 35 acres of land to productive use in the mine pit area. Alternative A is described in detail on page 2-27 of the DEIS.





## CHAPTER 3

### ERRATA

This Chapter contains specific modifications and corrections to the Denton-Rawhide Mine Expansion Project DEIS. These corrections and modifications were made in response to comments received during the public comment period.

Page 4-9; column 2; paragraph 5 of the DEIS has been revised as follows:

The goal of reclamation would be to create a self-sustaining Reclaimed Disturbed Plant Community (RDPC) to assist in establishing post-mining land use. Canopy cover shrubs, grasses, and forbs in undisturbed areas of the mine currently ranges from 10 to 30 percent. KRMC's standard of revegetation success is 100 percent of current vegetative cover (i.e., 10 to 30 percent canopy cover). Noxious weeds would not count toward the 100 percent vegetative cover goal. Seed test plots were established in 1992 on 16.5 reclaimed acres. KRMC is monitoring these plots and, with BLM approval, would derive the RDPC from the seed test plot program.

Chapter 5 - Consultation, Coordination, and Preparation: Mailing List in the DEIS has been modified to add the following:

Bureau of Land Management  
Director (WO-480)  
1620 L Street NW  
Washington, D.C. 20036

Bureau of Land Management  
Office of Public Affairs  
1859 C Street, N.W. Rm. 5600  
Washington, D.C. 20240

Bureau of Land Management  
State Director (NV-932)  
850 Harvard Way  
Reno, NV 89520

Bureau of Land Management - 8 copies  
Nevada State Office  
Attn: Calvin Robinson  
850 Harvard Way  
Reno, NV 89520

Bureau of Indian Affairs  
Western Nevada Agency  
167 Hot Springs Road  
Carson City, NV 89706

Bureau of Reclamation  
Denver Federal Center (D-150)  
Building 67  
P.O. Box 2507  
Denver, CO 80225-0007

Center, Urban Affairs & Policy Research  
Attn: H. Paul Friesema  
2040 Sheridan Road  
Evanston, IL 60208-4100

Churchill County Dept. of Planning  
Attn: Rick Sugg  
180 W. First Street  
Fallon, NV 89406

Colorado State University  
Attn: Fred C. Schmidt  
Documents Department - KW  
The Libraries  
Fort Collins, CO 80523-1019

Environmental Leadership  
Attn: Patty Moen  
P.O. Box 10786  
Reno, NV 89510

Fallon Paiute Shoshone Tribe  
Attn: Thomas C. Burton, Chairman  
8955 Mission Road  
Fallon, NV 89406

Honorable Richard Bryan  
600 E. Williams, Suite 304  
Carson City, NV 89701-4052

Mr. John Geddie  
8040 Bellemah Ct., NE  
Albuquerque, NM 87110

Greystone  
Attn: Charlene Lopez  
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Honorable Harry Reid  
600 E. Williams, Suite 304  
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Honorable Barbara Vucanovich  
300 Booth St., Room 3038  
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JBR Environmental Consultants  
Attn: Nina Cameron  
8160 South Highland Drive  
Sandy, UT 84903

Mr. Samuel E. King  
1150 Allen Road 143-12  
Battle Mountain, NV 89820

Lahontan Audubon Society  
Attn: Ken Pulver  
1585 Wheat Grass  
Reno, NV 89509

Lazer  
c/o John Williams  
12770 SW Foothill Dr.  
Portland, OR 97225

Library of Congress Madison Building  
Exchange and Gift Div. (16 copies)  
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2nd)  
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Mr. Dewey Marino  
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Thornton, CO 80229

Mineral County  
P.O. Box 150  
Hawthorne, NV 89415

Minerals Management Services  
Attn: Harry Corley  
P.O. Box 25165 MS# 3153  
Denver, CO 80226



Mineral Policy Center  
1612 K Street NW., Suite 550  
Washington, D.C. 20006

National Park Service (2310) - 5 copies  
Attn: Dale Morlock  
P.O. Box 37127  
Washington, D.C. 20013-6127

Native American Heritage Commission  
915 Capital Mall, Room 288  
Sacramento, CA 95814

Natural Resource Defense Council  
Attn: Johanna Wald  
1359 New York Avenue, NW  
Washington, D.C. 20005

The Nature Conservancy  
Attn: Jan Nachlinger  
443 Marsh Avenue  
Reno, NV 89509-1522

Nevada Conservation League  
Attn: Glenn Miller  
581 Creighton Way  
Reno, NV 89503

Nevada Department of Wildlife  
Attn: John Gebhardt  
380 W. B Street  
Fallon, NV 89406

Nevada Division of Environ. Protection  
Attn: Connie Davis  
333 W. Nye Lane  
Carson City, NV 89710

Nevada Mining Association  
5250 S. Virginia St., Suite 220  
Reno, NV 89502

Nevada Outdoor Recreation Association  
Attn: Charles Watson  
P.O. Box 1245  
Carson City, NV 89702

Nevada State Clearinghouse - 12 copies  
Department of Administration  
Attn: Julie Butler  
Blasdel Building, Room 204  
Carson City, NV 89710

Nevada Wilderness Association  
Attn: Roger Scholl  
4870 Hilton Court  
Reno, NV 89509

Nevada Wildlife Federation  
P.O. Box 71238  
Reno, NV 89509-3370

Kenneth R. Paulsen Consulting, Inc.  
Attn: Kenneth R. Paulsen  
P.O. Box 1930  
Arvada, CO 80001

Public Resource Association  
Attn: Susan Lynn  
1755 East Plumb Lane, #170  
Reno, NV 89406

Rural Development Service  
Attn: Herb Shedd  
1390 S. Curry Street  
Carson City, NV 89703

Schwartz Radio, Inc.  
1617 Fairview Drive, Suite I  
Carson City, NV 89701

Sierra Club Toiyabe Chapter  
Rose Strickland, Public Lands Comm.  
P.O. Box 8096  
Reno, NV 89507

Ms. Debra Struhsacker  
3610 Big Bend Lane  
Reno, NV 89509

U.S. Army Corps of Engineers  
Sacramento District  
1325 J Street  
Sacramento, CA 95814-2922



U.S. Army Corps of Engineers  
Attn: Nancy Kang  
300 Booth Street, Room 2103  
Reno, NV 89509

U.S. Dept. of the Interior (MS-2340)  
Office of Env. Policy and Compliance  
1849 C Street, NW  
Washington, D.C. 2024

U.S. Department of Energy  
Office of Env. Compliance (EH-23)  
1000 Independence Ave., SW  
Washington, D.C. 20585

U.S. Department of the Interior  
WA 320  
L Street, Mail Stop 501  
Washington, D.C. 20240

U.S. EPA, Region IX - (3 copies)  
Attn: Jeanne Geselbracht CMD-2  
75 Hawthorne Street  
San Francisco, CA 94105-3901

U.S. Environmental Protection Agency  
Office of Federal Activities (A-104)  
401 M Street SW  
Washington, D.C. 20460

U.S. Fish and Wildlife Service  
Attn: Mary Jo Elpers  
4600 Kietzke Lane, Building C-125  
Reno, NV 89502-5093

U.S. Forest Service  
Toiyabe National Forest  
1200 Franklin Way  
Sparks, NV 89431

Walker Lake Paiute Tribe  
Attn: Mr. Ben Leyva, Chairman  
P.O. Box 220  
Schurz, NV 89427

Walker Lake Paiute Tribe  
Attn: Richard Black, Land Use Planner  
P.O. Box 220  
Schurz, NV 89427

Weyerhaeuser & Company  
Attn: Greg Tolbert  
Mail Stop CH2J28  
Tacoma, WA 98477-0001

The Wilderness Society  
Presidio Building 1016  
P.O. Box 29241  
San Francisco, CA 94129-0241

Yerington Paiute Tribe  
Attn: Stacy Stahl, Chairperson  
171 Campbell Lane  
Yerington, NV 89447

Chapter 6 - References and Glossaries; List of  
References in the DEIS has been modified to add  
the following references:

**SWCA, Inc. Environmental Consultants.**  
1997. Kennecott Rawhide Mining  
Company. Hooligan Hill Mining  
Complex Bat Habitat Closure.

## CHAPTER 4

# COMMENTS AND RESPONSES

This chapter includes copies of all public comments received during the comment period on the Denton-Rawhide Mine Expansion Project DEIS. BLM's responses to substantive comments are provided adjacent to the reproduced comment letters. Nine letters were received by BLM during the public comment period which ended on January 3, 1997.

An open-house public meeting was held in Carson City, Nevada on November 20, 1996, to accept comments on the accuracy and adequacy of the DEIS. One member of the public attended the meeting but no comments were received.

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Letter #1



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

January 10, 1997

Terri Knutson  
Bureau Of Land Management  
1535 Hot Springs Road  
Carson City, NV 89706

Dear Ms. Knutson:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Denton-Rawhide Mine Expansion Project, Mineral County, Nevada. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementation Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The DEIS analyzes impacts of alternatives for expanding the Denton-Rawhide gold mine. The proposed action includes expansion of an open pit and waste rock pile, construction and operation of a heap leach facility and other ancillary facilities, and reclamation. The BLM-preferred alternative is Alternative A, partial backfilling of the Murray Hill pit. The expansion would add approximately five years to the active mine life of the Denton-Rawhide Mine.

Based on our review of this project, we have rated this DEIS as LO -- Lack of Objections (see the enclosed "Summary of Rating Definitions and Follow-Up Actions"). We do, however, have the following comments regarding geochemical characterization of waste rock and biological resources.

We note that the DEIS states that an Acid Neutralizing Potential to Acid Generation Potential (ANP:AGP) of 1:2:1 was used as the threshold for non-acid generating material for this project. We understand, however, that the BLM Nevada State Office has adopted a policy to use 3:1 ANP:AGP as the threshold below which material may be considered potentially acid generating and analyzed and/or treated accordingly. EPA supports the BLM State Office's use of a 3:1 threshold and understood that this would be used by all district offices in Nevada.

## Response 1A

As stated on page 4-2; column 1; paragraph 2; "...the total weighted average ANP:AGP ratio is 9.81:1.0 percent CaCO<sub>3</sub>". This ratio far exceeds the current NDEP ANP:AGP criteria of 1:2:1 and the suggested USEPA policy ANP:AGP criteria of 3:1. Therefore, excess ANP exists throughout the combined waste rock material at the Denton-Rawhide Mine. As of this writing, BLM has adopted USEPA's policy of 3:1 threshold for ANP:AGP (IM No. NV-97-017).



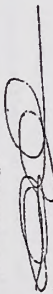
**Response 1B**

See Errata page 3-1. The revegetation goal for reclamation activities at the Denton-Rawhide Mine is to establish vegetation to 100 percent of the premining condition.

**B** { We also understand that the revegetation goal for this project is only 50 percent because revegetation at this site has been difficult due to edaphic and climatic conditions. However, we urge BLM to require the mining company to make every effort to return disturbed surfaces to as natural a state as possible, ideally targeting a goal of closer to 100 percent revegetation over a reasonable amount of time.

We appreciate the opportunity to review this DEIS. Please send a copy of the Final Environmental Impact Statement to this office when it is officially filed with our Washington, D.C., office. If you have any questions, please call me at (415) 744-1584 or Jeanne Geselbracht of my staff at (415) 744-1576.

Sincerely,



David J. Farrel, Chief  
Federal Activities Office

002621/96-373

Enclosure

cc: NDEP, Bureau of Mining Regulations and Reclamation

## SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION

## Environmental Impact of the Action

## LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

## EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

## EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

## EIL-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

## Adequacy of the Impact Statement

## Category 1-Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

## Category 2-Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

## Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."



## Letter #2

Rachel Thomas  
Box 4837  
Huachuca City, Arizona 85616

November 29, 1996

Bureau of Land Management  
Carson City District Office  
1535 Hot Springs Road  
Carson City, Nevada 89706  
Attn.: Terri Knutson  
Denton-Rawhide EIS Project Manager.

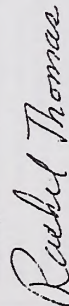
Reference 61 FR 56566-56567, November 1, 1996 pertaining to the Notice of Availability for the Denton-Rawhide Mine Expansion Project Draft Environmental Impact Statement and Notice of Comment Period and Public Open-House

Our public lands should be managed for productivity and sustainability. For the best results, land management decision should be made by people who have to live long term with the consequences of the decisions, not some government employee who is on the job for a year or a few years then moves on.

No action should be accomplished without considering the economic impact on local communities along with their customs, traditions and cultures. The involvement of state and local governments should be the first requirement for a plan such as the one you are proposing.

Request I be provided a copy of the Environmental Impact Statement and any future actions on this subject.

Sincerely



Rachel Thomas

## Response 2A

Comment noted. See also page 5-1 of the DEIS under Public Participation Summary.



## Letter #3



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
NEVADA STATE OFFICE  
4600 KIETZKE LANE, SUITE 125C  
RENO, NEVADA 89502-5055

December 4, 1996  
File No. BLM 5-4

## Memorandum

To: Environmental Impact Statement Project Manager, Carson City District Office,  
Bureau of Land Management, Carson City, Nevada (Attn: Terri Knutson)

From: State Supervisor, Nevada State Office, Reno, Nevada

Subject: Denton-Rawhide Mine Expansion Project Draft Environmental Impact Statement

The Fish and Wildlife Service (Service) has reviewed the November 1996 draft environmental impact statement (DEIS) for Kennecott Rawhide Mining Company's Denton-Rawhide Mine Expansion Project. The DEIS analyzes impacts associated with expansion of existing mining operations at the Denton-Rawhide Mine in Mineral County, Nevada. The proposed action includes: expansion of the Murray Hill pit and waste rock disposal facility; development and operation of an additional run-of-mine leach pad and solution ponds; and the relocation of a run-on-control diversion ditch. The mine expansion would disturb an additional 364 acres of land beyond that of the current project.

GENERAL COMMENTS

We recommend the project proponent develop additional measures to avoid and reduce adverse impacts to wildlife resources that would result from the proposed mining project. We recommend preventing access by all wildlife, particularly migratory birds, to toxic solutions associated with solution ponds, puddles on top of heap leach pads, and in solution collection channels. Under the Migratory Bird Treaty Act (15 U.S.C. 701-718h) (MBTA), it is unlawful to kill migratory birds, and no permits are issued to allow take of migratory birds.

Response 3A

Under current and expanded operating conditions, most birds, bats, and other wildlife are excluded from process ponds by netting over ponds and fences. Mesh size of the netting is the smallest available, but it does not exclude sparrow-sized birds. Small birds can access solution ponds through the netting; however, there has been no mortality to small birds observed by mine employees monitoring for cyanide-caused mortality to birds and other wildlife.

Current permit requirements specify that pools and puddles of solution containing cyanide not be allowed to form on leach pads. Future permit requirements for expanded operation also prohibit pools and puddles from forming on leach pads. Daily monitoring of leach pads is conducted by company employees to identify and treat areas if ponding occurs. Puddles are immediately drained by ditching. Leach Pad Inspection and Ponding Reports are completed by company personnel who inspect leach pads and remediate problems with ponding.



**SPECIFIC COMMENTS****CHAPTER 2. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

**B** Proposed Action, Leach Pad, page 2-26. The method in which the cyanide solution would be applied to the proposed additional leach pad was not discussed in the DEIS. Information on this subject should be provided in the final environmental impact statement (FEIS). On page 2-11 (section Existing Operations, Heap Leaching), it is stated that currently the ore is drip irrigated on top of the leach pad with a water-based cyanide solution. Drip emitter use on top of leach heap facilities has caused incidental migratory bird deaths. Mortality may occur if ponding of solution develops. The FEIS should address the potential for birds (and possibly bats) to become exposed to cyanide solutions on the tops of leach heaps. Other techniques, such as buried drip lines, should be considered to eliminate the potential for incidental migratory bird mortality which may be a violation of the MBTA.

**C** Proposed Action, Hazardous Materials And Hazardous Waste, page 2-27. Due to the proposed action's extension of mine operations, there is a potential for increased risk of accidents related to the transport of toxic and hazardous materials. We recommend the FEIS address the potential for adverse impacts to waters, fish, and wildlife in the event of a spill during the transportation of toxic and hazardous materials. Transportation routes should be defined, with special emphasis on locations where important habitats such as rivers and streams are crossed. Information should be provided on spill response capabilities along various segments of the transportation routes. The FEIS should provide an assessment of these concerns, with regard to the proposed action and alternatives.

**CHAPTER 4. CONSEQUENCES OF THE PROPOSED ACTION AND ALTERNATIVES**

**D** Vegetation, Direct And Indirect Impacts, Proposed Action, page 4-9. The DEIS does not discuss the potential for the removal of vegetation during the avian breeding season that may result in destruction of bird nests and/or their contents. Such destruction may be a violation of the MBTA. Clearing of land should be timed to avoid the potential for destroying active nests and young of birds that breed in the area. If vegetation clearing must be done during the breeding season, careful surveys should be conducted to ensure that no nests are present before proceeding with clearing operations. We recommend this issue be discussed in the FEIS.

**E** Vegetation, Potential Mitigation And Monitoring Measures, page 4-10. This section discusses mitigation and monitoring measures for vegetation, including the use of seed mixtures, preventing livestock grazing of revegetated areas, and monitoring the invasion of weedy plant species on reclaimed areas. The Service recommends that these proposed mitigation measures be implemented. Regarding the planting of variable seed mixes, the FEIS should provide information on the composition of seed mixes that would be used on reclaimed areas. The Service recommends the use of native, indigenous plant species to prevent the further spread of non-native vegetation which may adversely effect biological diversity.

**Response 3B**

Please see response to paragraph A. Permit conditions specify that cyanide-containing pools and puddles not be allowed to form.

**Response 3C**

There would be no change of routes for hauling hazardous and toxic materials with the expanded project. Existing and future transportation of toxic and hazardous materials, with the expanded project, is regulated by the U.S. Department of Transportation and Nevada Department of Transportation.

**Response 3D**

The project area has not been inventoried for passerine birds that may nest in the area. If nesting birds are disturbed during the nesting season, adults would be displaced to adjacent undisturbed habitats and nests and nestlings could be destroyed by mining activities. If bird nests and young were destroyed by mine expansion, this loss would not significantly affect local passerine bird populations. Extensive native plant communities surround the existing and proposed mine facilities and provide nesting habitat for species of birds that may nest in the area proposed for disturbance. Loss of nests and young birds could be avoided by constructing when birds are not nesting and raising young.

**Response 3E**

Comment noted. See pages 2-18 and 2-19 in the draft EIS for proposed seed mix and discussion.

**Response 3F**

Comment noted. See pages 2-18 and 2-19 in the draft EIS for proposed seed mix and discussion.



## Response 3G

Please see response to paragraph A.

**G** Wildlife And Fisheries Resources, Direct And Indirect Impacts, Proposed Action, page 4-11.  
It is stated that small birds could gain access to toxic solutions resulting in bird mortality. Such an occurrence could be a violation of the MBTA. Additional mitigation measures should be considered to prevent this problem.

## Response 3H

Adits and shafts of the Hooligan adit were covered with chicken wire for the period October 30 through November 1, 1996. Chicken wire allows bats to exit and discourages their re-entering. Approximately, 60-70 bats exited the adits and shafts. Surveys of the adits and shafts on November 12, 1996 indicated that all but about 6 bats exited and did not re-enter. The 6 remaining bats were allowed to exit by removing the mesh for a short period. After all the bats had left the Hooligan adits and shafts, the mine openings were covered with black plastic.

**H** Wildlife And Fisheries Resources, Potential Mitigation And Monitoring Measures, page 4-12.  
This section discusses mitigation and monitoring measures regarding bats. It states that direct mortality of bats could be avoided by evacuating them from the shafts/adits in the fall after the rearing of young and hibernation. The Service recommends this proposal be implemented. The Service also suggests that surveys of other adits in the project area be conducted and that these adits be protected by bat gates or another method so the bats are protected from human intrusion.

**I** Threatened, Endangered, Candidate, and BLM Sensitive Species, Direct And Indirect Impacts, Proposed Action, page 4-12. The DEIS does not discuss the potential for impacts to the bald eagle, a threatened species, which may occur within the project area. This information should be provided in the FEIS. If the analysis shows that the bald eagle may be affected, then consultation under the Endangered Species Act of 1973, as amended, would be required.

We appreciate the opportunity to comment on the DEIS for this project. If you have any questions, please contact Francesca C. Innocenti or Stanley Wienmeyer at (702) 784-5227.

## Response 3I

The proposed expansion would not cause impacts to bald eagles. Wintering bald eagles typically are attracted to open water, where favored prey (i.e. fish and waterfowl) are accessible, and to areas with high concentrations of carrion, or small mammals. The project area has none of these features that would be attractive to bald eagles, therefore, there would be a very low probability that bald eagles would be present in the project area. If bald eagles were present in the project area, there would be no elements of the project that would pose a risk to bald eagles.

*Stanley Wienmeyer*  
for Carlos H. Mendoza

cc:  
Administrator, Nevada Division of Environmental Protection, Carson City, Nevada  
Regional Manager, Nevada Division of Wildlife, Fallon, Nevada  
Project Manager, Nevada/Sierra Regional Office, Reno Field Office, Army Corps of Engineers, Reno, Nevada  
Chief, Wetlands Section, Environmental Protection Agency, San Francisco, California



## Letter #4



BOB MILLER  
Governor

STATE OF NEVADA  
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES  
**DIVISION OF WILDLIFE**

1100 Valley Road  
P.O. Box 10678  
Reno, Nevada 89520-0022  
(702) 688-1500 • Fax (702) 688-1595

December 26, 1996

Ms. Terri Rodefer  
Clearinghouse Environmental Advocate  
Nevada State Clearinghouse  
Dept of Administration  
Budget and Planning Division  
Blasdel Bldg., Rm 200  
209 E. Musser St  
Carson City, NV 89710

.Re: Nevada SAI # E1997-053 Due December 30, 1996

Dear Terri:

The Division of Wildlife appreciates the opportunity to review and comment on DEIS for the Deaton-Rawhide Mine Expansion Project. The Division is concerned about the loss of the Hooligan Adit as it represents an "irreversible and irretrievable Commitment of Resources" in that a suitable bat hibernacula and nursery may not be replaceable by other adits and shafts in the immediate area, although the Regent Adit may well be able to absorb the displaced bats. An acceptable mitigation for the loss of the Hooligan Adit may be to install quality bat gates on several of the remaining adits, particularly focusing on the Regent.

In addition the Division would like to discuss future expansion plans for the mine -- whether there could be plans to take out the Regent Adit sometime in the future, or whether there are opportunities to discuss the permanent conservation of the Regent as bat habitat. Our concern is that cumulative effects may become unmanageable if the area's only other documented hibernacula/nursery is destroyed at a later date.

The measures the mine has taken to exclude migratory birds from solution ponds and leach pads seem to be sufficient to address any concern for the stray bald eagle that might pass by.

If you have any questions or if we can be of assistance please contact John Gebhardt.

Sincerely,

William A. Molini, Administrator

Richard T. Heap, Jr.  
Regional Manager  
Region I

JLG/jg  
cc: Habitat - Reno  
BLM - Carson City

PETER C. MORROS  
Director  
Department of Conservation  
and Natural Resources

WILLIAM A. MOLINI  
Administrator

#### Response 4A

Bat gates typically are installed at abandoned mine features to prevent human access and vandalism while allowing bats to enter and exist. Because the study area is remote and has relatively little human use, the potential for vandalism or other human-induced impacts is very low; consequently, installation of bat gates does not appear warranted at this time. BLM will complete an inventory of adits and underground openings in the project area to identify adits which exhibit bat activity.

#### Response 4B

It is not known if future mining activities that would destroy the Regent Adit may be proposed. Exploration and feasibility studies have not been completed.



## Letter #5

FROM JOHN WILLIAMS  
12770 SW FOOTHILL DR  
PORTLAND, ORE 97225  
503-626-5736, FAX-503-641-2093

BLM-CARSON CITY DISTRICT  
BY FAX AND MAIL.  
Attention: Terri Knutson, EIS Project Manager  
12/28/96

Dear Ms. Knutson:

I am a researcher for the Northern Nevada Building Trades Council (BCT), and Operating Engineers Local #3, both of whom represent the interests of thousands of skilled workers and their families in Northern Nevada, including the vicinity of the proposed Denton-Rawhide Mine expansion.

Here are the BCT's and Local #3's concerns regarding the DEIS for this proposed mine expansion. Please send the FEIS and ROD, and any further correspondence to my address. Thank you very much for you and your agency's past and future cooperation.

Yours, John Williams

cc: attorneys David Rosenfeld and Linda Williams  
Rich Houts, president BCT  
Jerry Bennett, VP, Local #3

*John Williams*  
7 pages Follow

**COMMENTS BY THE NORTHERN NEVADA BUILDING TRADES COUNCIL (BCT) AND OPERATING ENGINEERS #3 REGARDING THE DRAFT ENVIRONMENTAL IMPACT STATEMENT ON THE EXPANSION OF THE DENTON-RAWHIDE MINE**

This existing facility plans to expand the existing open (Murray) pit by 200 acres. The preferred alternative would eventually backfill 35 acres of the Murray pit. About 37 million tons would be added to an existing waste rock pile, increasing its surface area by 60 acres. The Mine would build a new 92 acre trench pad, and move a ditch. Just over 1000 acres is disturbed at the existing mine site. The expanded mine would add 400 acres of disturbance, to 1400 acres, and the total operations area would be increased to 2605 acres.

The DEIS rejected the alternative of complete backfilling of the Pit because it claimed that rehandling waste rock costs too much, and there would be no additional environmental benefit from a complete pit backfilling..

**DEIS LACKED SUFFICIENT DISCUSSION OF COMPLETE BACKFILLING ALTERNATIVE**

The total backfilling proposal was eliminated from detailed analysis, and only one paragraph of discussion was provided on this topic in the DEIS. Since there was no evidence at all presented in the DEIS regarding the adverse economics of complete pit backfill, the record is completely silent on the economic justification for eliminating this alternative.

**Response 5A**

NDEP has issued an exemption to KRMC to leave open pits at cessation of mining at the Denton-Rawhide Mine.

As described on page 2-28 of the DEIS, in order to completely backfill the Murray Hill pit, an estimated 70 percent of the total waste rock produced in the Murray Hill pit (approximately 52MM tons), would need to be loaded, hauled, placed, and graded in the mined-out pit. Based on calculations provided by KRMC, complete backfilling of the Murray Hill pit would add 18 percent to the mining/reclamation gross cost for the Denton-Rawhide Mine. Predicted costs associated with complete backfill based on gross profit would exceed 136 percent of the potential gross profit for the mine. This percent increase over current mining/reclamation costs is identified as unreasonable and would cause the project to be unprofitable.

BLM evaluated potential benefits associated with restoration of an estimated 373 acres of land through complete backfill of the Murray Hill pit. Although implementation of the Proposed Action and/or Alternative A would have a residual adverse impact on area wildlife, limited wildlife resources exist in the project area so restoration of the land surface at the pit was determined to have insignificant benefit to area wildlife. Leaving highwalls associated with the Proposed Action and Alternative A was identified as having potential beneficial effects for bats and raptors by providing numerous nesting and roosting sites.

Complete backfill would result in restoration of approximately 8.5 AUMs for grazing use of the backfilled land surface. This number of AUMs is equal to 0.2 percent of the total AUMs allowed on the La Beau Flat Allotment. BLM determined that the reduction of 0.2 AUMs from this allotment is not significant and that restoration of grazing on land associated with the mine pit is not warranted.

Complete backfill would not occur until mining operations had ceased at the Murray Hill pit. As such, complete backfill would not reduce the size of disturbance area associated with the waste rock disposal facility. The same amount of land would be disturbed. Since reclamation of the waste rock disposal facility is required by NDEP and BLM rules, no reduction in acres of land reclaimed would result from implementation of the Proposed Action and/or Alternative A. Complete backfill of the Murray Hill pit would not result in a change in the number of acres reclaimed at the waste rock disposal facility.

Reclamation goals for the Denton-Rawhide Mine have been revised to reestablish 100 percent of the vegetative cover. See Errata page 3-1.



**ECONOMIC ARGUMENT NOT SUBSTANTIATED**

The BCT objects that the DEIS did not demonstrate that sufficient study was given to the complete backfill alternative. If waste rock rehandling is too expensive, the DEIS should have contained an analysis of those costs, including an explanation of how those backfilling costs would affect the price of the processed gold, compared to the projected market price of the gold. For instance, the added costs of complete pit backfilling would raise the cost of each and mined and refined ounce of gold by \$100 per ounce. These added costs could then be compared to the profit margin of the Mine, in order to determine if the backfilling costs make the Mine expansion uneconomic.

Response 5B

**ENVIRONMENTAL AND ECONOMIC BENEFITS OF COMPLETE PIT BACKFILL NOT PROVIDED IN DEIS**

The BCT also objects to the DEIS' unexplained conclusion that complete backfilling of the Murray Pit would not provide additional environmental benefits. On the plain face of it, complete backfilling of the Murray pit could reduce the amount of permanent surface disturbance at this site by approximately 165 acres (p. 2-26). This 165 acres will be permanently lost for all uses of any kind, including grazing, camping, wildlife and aquatic habitat, if it is not backfilled. Thus it certainly seems that complete backfilling of the Murray Pit does provide some environmental benefit, in the form of additional surface area that would be available for multiple beneficial uses. The DEIS' bald claim that there is no environmental benefit from complete backfilling should be fully explained, in light of the potential for reducing losses of surface areas through backfilling.

Response 5C

See Response 5A.

Backfilling the Murray Pit more completely would eliminate the loss of surface areas to the Pit, and would also reduce the size of the expanded waste rock pile, because waste rock would go into the backfilled pit, rather than onto the waste rock pile. Since the waste rock pile is to be expanded by 60 acres, then backfilling the Murray pit could also reduce this proposed 60 acres of disturbance by a measurable amount.

Response 5D

See Response 5A.

Either the waste rock pile footprint would be reduced, or the height of the rock pile would be lessened, if additional waste rock were diverted into the Murray Pit. Either effect would be beneficial. A smaller footprint would mean less surface disturbance, and a reduction in the rock pile's height would mean that the reclamation of the rock pile would start closer to grade, and would require less heavy equipment operation to "smooth" the rock pile to the 3-1 slopes at which it is to be reclaimed.

Response 5E

See Response 5A.

**COMPLETE BACKFILLING WOULD REDUCE LOSSES OF SURFACE AREA BY ABOUT 400 ACRES**

In other words, additional backfilling of the Murray Pit could, by filling all or most of the Pit, and diverting waste rock away from the waste rock pile, decrease the amount of temporal and permanent surface disturbance at this site by almost 400 acres.

Response 5F

See Response 5A.

It is true that reclamation will be attempted on the waste rock pile, so that 60 acres of disturbed area may not be completely and permanently lost for all time to other uses. But it is likely that the waste rock pile will not be reclaimed to 100% of its beneficial pre-mining uses. For instance, 50% vegetation is considered successful reclamation (p. 4-9). It is unlikely that the ultimate cultivation on the waste rock pile will include 60 acres of habitat of native species and shrubs. So the waste rock area, even after reclamation, represents an area that will suffer some permanent, as well as temporal, losses of full productive uses. In other words, reducing the size and height of the waste rock pile, through greater pit backfilling, would be beneficial.

Response 5G

See Response 5A.



Reduction of the waste rock pile area size, by use of waste rock for greater backfilling of the pits, also means that the Mining company will be able to spend less time and money on its reclamation efforts on that site. This potential savings should be calculated, for instance the difference between reclaiming and monitoring a 60 acre waste rock pile, versus the costs of reclaiming a 40 acre waste rock pile. Any reduction in expenditures represents a financial savings that would, in part, mitigate any increased expenses incurred in more completely backfilling the Murray pit.

Response 5H

See Response 5A.

#### COMPLETE PIT BACKFILL WOULD REDUCE TIME SPENT REGRADING WASTE ROCK PILE FOR RECLAMATION

After all, the waste rock (pile) must be "rehandled" anyway at some point in time, as part of the reclamation procedures. The rock pile must be regraded to 3-1 slopes, and covered with growth media and revegetated, according to the DEIS at 2-27. If the waste rock pile is reduced in size, because the waste rock is backfilled into the pits, then there may be less area and a lower pile to be regraded, covered and revegetated. It may be environmentally advantageous to rehandle the waste rock by greater backfilling of the remaining pits at this site, than to have to regrade and revegetate a larger, taller waste rock pile.

Response 5I

See Response 5A.

#### COMPLETE BACKFILL WOULD REDUCE REHANDLING OF ALLUVIUM

Another reason to consider additional backfilling, and the resulting reduction of the waste rock pile area, is that there is not enough topsoil to recover all the Mine's disturbed areas, according to p. 2-18. As a result, alluvium must be excavated from the open pits, and then rehandled to be placed, and substituted for topsoil on the areas to be reclaimed. Any reductions in the disturbed surface area, for instance by reducing the waste rock footprint through greater use of waste rock for backfilling, could reduce the amounts of rehandling of alluvium that otherwise the Mine company would have to rehandle after excavating it from the open pits. This reduction in alluvium rehandling would also represent a potential savings to mitigate the added costs of backfilling waste rock into the open pits.

Response 5J

Because the footprint associated with existing and proposed facilities would be the same irrespective of an alternative which required complete backfill of the Murray Hill pit, the same amount of alluvium handling would be necessary under any reclamation plan. Alluvium would need to be loaded, hauled, and respread on the entire disturbance footprint of the mine facility. See also Response 5A.

#### COORDINATION OF BACKFILLING THE MURRAY PIT WITH PROPOSED DEVELOPMENT AT THE REGENT SITE

This Mine company may also conduct additional operations just 1.5 miles away, at the Regent Mine potential site. (4-24) This site which has been extensively and recently explored for mineralization, may be developed in the near future, producing another 200 acres of surface disturbance at the open pit, waste rock pile, and other processing and storage facilities.

Response 5K

Comment noted. At the present time, no mine plan or engineering design information has been compiled concerning potential development of the Regent Mine.

But this DEIS failed to consider the possibility of placing waste rock from the Regent mine site, into the Murray open pit. The disposal of Regent's waste rock into the Murray pit would reduce temporal and permanent surface disturbance at both locations, and facilitate more efficient and less costly reclamation efforts at the Regent waste rock piles, which would be reduced in size and slope, if waste rock were placed into the Murray pit instead.

#### DEIS DID NOT DISCUSS REASONABLE MITIGATION FOR SURFACE AREA LOSSES IF PIT IS NOT COMPLETELY BACKFILLED

If the Pit is not completely backfilled, then about 400 acres of surface area is lost. This area is potential wildlife habitat, or a recreation and camping and hunting area. Under the proposed alternative these uses would be lost, but these losses are not mitigated.

Local and Federal agencies with expertise have suggested in many other DEISs on Nevada Mines and large industrial projects that surface areas lost to projects, because of unbackfilled open pits and other development features, be mitigated, by the project owner reclaiming or improving habitat and surface areas elsewhere.



Other recent plans for large-scale disturbances of public lands have included these mitigation measures. For instance, the Tuscarora Natural Gas Pipeline was permitted in the Summer of 1995, by NEPA documents and RODs issued by the BLM and other federal and state agencies. This Pipeline's route through northeast California and Northwest Nevada caused significant degradation and loss of wildlife habitat, among its adverse impacts.

The Tuscarora developer, with input from the resource agencies, crafted a detailed mitigation plan as part of the compliance with the NEPA process. The draft and final EIS and ROD for that project contained precise details about what sorts of habitat mitigations would be provided by the developer, even mandating the sums of money, and the title transfer for the designated acreage of mitigation lands, that would be dedicated for short and long term on and off-site habitat restoration and monitoring.

This type of detail provides an adequate basis for concluding that the Tuscarora project would ultimately compensate for its degrading of public lands.

But this DEIS lacks any sort of detailed mitigation plan to compensate at all for the losses of about 400 acres of surface area, due to the Mine development. The BCF does not seek or expect a massive and expensive mitigation plan for these surface area losses. But NEPA does mandate that reasonable mitigation measures for adverse impacts be discussed, and if not implemented, explained in the Draft and Final EIS and ROD. But the BCF did not see a discussion of a reasonable mitigation plan for the 165-400 acres of lost surface area due to the Mine development.

#### UNEXPLAINED INCREASE IN FENCED AREA

Although the area to be actively mined will increase by about 400 acres, the area that will be fenced off from public access will be increased by about 1000 acres, and will include about 1200 acres that is not under active mining. The DEIS did not explain why this large area outside of the active area of operations will be fenced. The temporal losses of an additional 1200 acres of lands is an impact that could be reasonably mitigated, possibly by reducing the amount of fenced-off area unless and until it is absolutely necessary. In any event, the fencing off of over 2600 acres, when only about 1400 acres in being mined, represents a possible conflict with the Enclosures Act, which should be explained in the EIS.

#### POTENTIALLY UNMITIGATED IMPACT ON BAT HABITAT

The Mine would destroy the existing Hooligan adit, which is home for several bat species, some of which are rated BLM sensitive. The DEIS said this adit would be lost, and the bats routed. But the DEIS did not explain any possible and reasonable mitigation measures to restore bat habitat, including but not limited to avoiding these adits, or protecting and preserving other bat-frequented adits from future developments.

#### AIR QUALITY

This Mine's point sources (smokestacks) emit a total of over 230 tons/year of air pollution. This constitutes about 90% of the tonnage of what the EPA considers a "significant" amount of air pollution. In addition, the Mine gas several sources of "fugitive" air emissions that are not discharged through a smokestack; dust from roads, conveyors, truck loading, etc. The Mine's total emissions of both point source and fugitive air pollution will be continued for many additional years, as a result of this Mine's expansion.

#### Response 5L

Comment noted. The majority of land involved in the Murray Hill pit is private fee land controlled by KPMC. Of the 373 acres which encompass the Murray Hill pit and the proposed expansion, 54 acres are public land; 319 acres are private land. BLM has determined that the loss of 54 acres of land associated with mining operations at the Denton-Rawhide Mine does not require mitigation beyond measures described in the DEIS.

#### Response 5M

The fenced area which encompasses the active mine site is established for public safety and to act as a buffer between disturbed and undisturbed land. Land within the boundary fence which is not to be disturbed by the proposed operation will remain undisturbed throughout the life of the mine.

Grazing within the previously fenced in area and the proposed fence has been suspended under authorization of BLM. Once mining activity has ceased and reclamation is completed, grazing will be reestablished should BLM choose to do so.

#### Response 5N

See Response 3H.



**Response 50**

KRMC maintains a valid air quality permit issued by the State of Nevada and operations are meeting current air quality standards. The Nevada air quality program is overseen by USEPA. KRMC's proposed mine expansion project would not increase or change mine production rates; therefore, no increase in emissions is anticipated from the mine expansion project. Fugitive dust is regulated by the State of Nevada permit requirements.

**Response 5P**

See Response 50.

**Response 50**

Modifications to or changes in the air quality standards currently being reviewed by USEPA are not effective until formal adoption by USEPA. As such, current air quality standards apply to operations at the Denton-Rawhide Mine and the mining operation remains in compliance with those requirements. Review and analysis of proposed air quality standards is beyond the scope of this EIS.

**Response 5R**

Comment noted.

**Response 5S**

See Response 50.

Since the cumulative effects of the Mines point and non-point air pollution sources is the emissions of a potentially significant amount of pollution, this topic, and the potential mitigation measures, deserved greater discussion in the DEIS. However, the DEIS did not present the reviewer with the air emissions figures for the current Mine, or the increased emissions after proposed expansion. While the DEIS did state that the Mine would have a (Nevada) air permit, these permits do not systematically regulate "fugitive dust" air emissions, which are the largest source of pollution from this Mine.

This dust is of special concern, since a fraction of this dust is the highly toxic air pollutant crystalline silica. A larger fraction of airborne dust is the air pollutant PM-10, which is very fine particles that can be drawn down deep into the human lungs, causing lung damage.

The mine expansion would prolong air quality impacts from PM-10, silica, and other pollutants for several years. The extension of air quality impacts for seven years, including the emissions of toxic air contaminants, are potentially significant impacts that deserve discussion in an EIS. Potential reasonable mitigations for these air quality impacts should be discussed and implemented in a FEIS and ROD, including but not limited to paving of the Mine's main haul roads.

While the DEIS did state that air quality standards may be currently met in the Mine's vicinity, the DEIS failed to inform the reviewers that the PM-10 standards are currently under review, in the light of many studies showing conclusively that an increase of PM-10 levels is correlated with an increase in the death rate of the exposed population.

This failure to study the health impacts of PM-10 increases at levels lower than the current standards is a flaw in the EIS. This potentially significant impact and the reasonable mitigation measures that would lessen its effect, should have been discussed in the DEIS.

**RESPIRABLE CRYSTALLINE SILICA AIR EMISSIONS**

The DEIS also declined to discuss the implications of the mine's emissions of airborne silica, because silica is not a air toxic under the Clean Air Act amendments. Nonetheless, airborne silica is often at high concentrations in Nevada, especially near large dust sources such as this mine, and is frequently in exceedance of Nevada's recommended air quality standards.

Silica is widely recognized as acutely harmful to health, because of its ability to severely damage the lungs. The World Health Organization considers silica emissions to be a potential carcinogen. The California (Proposition 65) Science Advisory board has judged that airborne respirable silica is a carcinogen known to the State of California. An EPA study concluded recently that: "Processes commonly associated with silica exposure include mining ... the causal relationship between inhalation of dust containing silica and silicosis (a often-fatal lung disease) is well established."

Because silica is a recognized health hazard, and increased prolonged emissions of airborne silica are an impact of this project, and compliance with the Nevada Air permit does not regulate silica emissions, this subject should have been discussed in the EIS, and reasonable mitigation such as haul road paving should have been mandated in the ROD.



**IMPACTS OF PAST AND FUTURE RELEASES OF TOXIC SUBSTANCES FROM THE MINE'S PROCESSING AND FUELING FACILITIES, NOT DISCUSSED IN THE DEIS**

The DEIS does not discuss the potential impacts on soils and groundwater from past and reasonably predicted future releases of toxic materials from the Mine's operations. Mines of this nature can use millions of tons annually of a wide variety of toxic materials, including acids, caustics, hydrocarbons and cyanide.

But the DEIS does not provide reviewers a list of these materials currently and in the future that will be used at this Mine. Nor does the DEIS discuss the potential impacts from leaks, spills, and releases of these substances, other than to note that groundwater is well below the surface.

This Mine like many others, has released measurable amounts of toxic materials to the soils and subsurface during its past operations. It has discharged, at times, almost 900 gallons per day from its process ponds, including the barren and pregnant ponds, which contain cyanide. One of its contractors reportedly spilled thousands of gallons of hydrocarbons onto the ground at a fueling pump.

Given this record, it is possible that the new proposed leach pad will also occasionally discharge cyanide and toxic materials to the subsurface. The DEIS should have described the likely and reasonably expected magnitude of these discharges, the likely impacts and the responses and mitigation measures to be taken.

**ENDNOTE**

1. EPA. "Ambient Levels and Noncancer Respiratory Effects of Inhaled Silica." October 18, 1994. ECAO-R604, pp 1-34

**Response 5T**

Table 2-3 on page 2-17 lists hazardous materials currently used at mining and ore processing operations at the Denton-Rawhide Mine. The rate of use of these materials would not change under the proposed mine expansion project.

**Response 5U**

The design of the ROM leach pad facility meets NDEP's criteria for leach pad construction. To date, no record or occurrence of a spill or leak has been identified which meets descriptions contained in this comment. No spills or leaks are anticipated during operation of the ROM leach facility because the facility would be constructed in accordance with NDEP design criteria.

BOB MILLER  
Governor

STATE OF NEVADA



JOHN F. COMEAUX  
Director

DEPARTMENT OF ADMINISTRATION

Capitol Complex  
Carson City, Nevada 89710  
Fax (702) 687-3983  
(702) 687-4065

December 30, 1996

Terri Knutson, EIS Project Manager  
Bureau of Land Management  
Carson City District Office  
1535 Hot Springs Road  
Carson City, NV 89706

Re: SAI NV # E1997-053

Project: DEIS -- Denton-Rawhide Mine Expansion  
Project  
3809 (NV030), N36-86-003P

Dear Ms. Knutson:

Enclosed are the comments from the Nevada Division of Minerals, Natural Heritage Program, Department of Transportation and Division of Water Resources concerning the above referenced project. These comments constitute the State Clearinghouse review of this proposal as per Executive Order 12372. Please address these comments or concerns in your final decision. If you have any questions please contact me at (702) 687-6382 or Julie Butler, Clearinghouse Coordinator/SPOC, at (702) 687-6367.

Sincerely,

A handwritten signature in cursive script, appearing to read "Terri Rodefer".

Terri Rodefer, Environmental Advocate  
Nevada State Clearinghouse

Enclosures



Letter #6



BOB MILLER  
Governor

STATE OF NEVADA  
DEPARTMENT OF BUSINESS AND INDUSTRY  
DIVISION OF MINERALS

400 W. King Street, Suite 106  
Carson City, Nevada 89710

[http://www.state.nv.us/busi\\_industry/mineral/mineral.htm](http://www.state.nv.us/busi_industry/mineral/mineral.htm)  
(702) 687-5050 • Fax (702) 687-3957

Las Vegas Branch  
2501 E. Sahara Avenue  
Suite 206  
Las Vegas, Nevada 89104  
(702) 486-4343  
Fax (702) 486-4345

CLAUDIA K. CORMIER  
Director  
RUSSELL A. FIELDS  
Administrator

December 19, 1996

Julie Butler, Coordinator  
Nevada State Clearinghouse  
Department of Administration, Planning Division  
Blasdel Bldg., Room 200  
Carson City, NV 89710

Re: Comments on the Shorter EIS Format for the Denton-Rawhide Mine  
Expansion Project -- Due Date: December 30, 1996.

The Nevada Division of Minerals has reviewed the Draft EIS for the Denton-Rawhide Mine expansion project and finds the new, shorter format to be very good. It is well organized, easy to read, there is no apparent decrease in the quality of content and information.

We assume that any of the supporting documentation for the various studies conducted in this EIS would be available from BLM upon request. Obtaining these materials should not be a major inconvenience to interested parties.

Please contact Division staff at any time for additional information or assistance.

Sincerely,

Bill Durbin  
Geologist

bd\ea1970536

Response 6A

Comment noted.



Nevada Department of Business & Industry

Letter #7

## NEVADA STATE CLEARINGHC 3E

Department of Administration  
Budget and Planning Division  
Blasdel Bldg., Rm. 200  
(702) 687-4065  
fax (702) 687-3983

DATE: November 7, 1996

Governor's Office Nuclear Projects Office Business & Industry Agriculture Energy Minerals Economic Development Tourism Fire Marshal Human Resources Aging Services Health Division Colorado River Commission Indian Commission	Legislative Counsel Bureau Communications Bd. Emp. Training & Rehab Research Div. PSC Transportation LMR Bureau of Mines UNR Library Wild Horse Commission Historic Preservation Emergency Management Washington Office	Conservation-Natural Resources Director's Office State Lands Environmental Protection Forestry Wildlife Region 1 Region 2 Region 3 Conservation Districts State Parks Water Resources Water Planning Natural Heritage
---	---	--

Nevada SAI # E1997-053 Project: DEIS - Denton-Rawhide Mine Expansion Project.

☒ Yes ☐ No Send more information on this project as it becomes available.

## CLEARINGHOUSE NOTES:

Note those agencies with an asterisk (\*) should have already received a copy of this document directly from the Bureau of Land Management. If you did not receive a copy, please contact the Clearinghouse.

See Related SAI # 96300108.

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local area-wide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than December 30, 1996. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. If you have any questions, please contact Terri Rodler, Clearinghouse Environmental Advocate, at 687-6382, or Julie Butler, Clearinghouse Coordinator, at 687-6367.

## THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

☐ No comment on this project  
☐ Proposal supported as written  
☐ Additional information below

## AGENCY COMMENTS:

All revegetation work should use only 100% native species. Non-persistent exotics (barley, hybrid wheatgrass, etc.) are also acceptable for temporary stabilization at densities that do not adversely compete with native species. Measures should be implemented to avoid the introduction or further spread of noxious or invasive weeds. Provided that it complies fully with NEPA, we have no objections to the format used for this DEIS.

Response 7A

See Response 3F.

James D. Morefield  
Signature

Natural Heritage  
Agency  
2 Dec. 1996  
Date



## Letter #8



STATE OF NEVADA  
DEPARTMENT OF TRANSPORTATION  
1263 S. Stewart Street  
Carson City, Nevada 89712

BOB MILLER, Governor

December 11, 1996

TOM STEPHENS, P.E., Director

In Reply Refer to:

JULIE BUTLER COORDINATOR  
NEVADA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
BUDGET DIVISION  
BLADEL BUILDING ROOM 204  
CARSON CITY NV 89710

PSD 7.01

Dear Ms. Butler:

The Nevada Department of Transportation has reviewed the project titled Project: DEIS--Denton-Rawhide Mine Expansion Project SAI# E1997-053.

Access to the Denton-Rawhide Mine is indicated to be via county roads. The Draft EIS on this project does not address the following concerns of the Department:

1. What is the access route beyond the county road system? It appears from Figure 1-1 that access to this facility depends on SR 361.
2. What will be the increase in truck traffic due to the proposed mine expansion?
3. A traffic study should be conducted to determine if any geometric improvements would be required to mitigate additional traffic as a result of this project.

Thank you for the opportunity to review this project.

Sincerely,

*Thomas J. Fronapfel*

Thomas J. Fronapfel, P.E.  
Assistant Director  
Planning

TJF:PAF:dg

#### Response 8A

KRMC does not use SR 361 as access to the Denton-Rawhide Mine site. See page 2-3 for access road description.

#### Response 8B

No increase in truck traffic would result from the proposed mine expansion. See page 2-20.

#### Response 8C

See Response 8B.

## Letter #9

## NEVADA STATE CLEARINGHOUSE

Department of Administration  
Budget and Planning Division  
Blasdel Bldg., Rm. 200  
(702) 687-4065  
fax (702) 687-3983

DATE: November 7, 1996

Legislative Counsel Bureau  
Nuclear Projects Office  
Business & Industry  
Agriculture  
Energy  
Minerals  
Economic Development  
Tourism  
Fire Marshal  
Human Resources  
Aging Services  
Health Division  
Colorado River Commission  
Indian Commission

Conservation-Natural Resources  
Director's Office  
State Lands  
Environmental Protection  
Forestry  
Wildlife  
Region 1  
Region 2  
Region 3  
Conservation Districts  
State Parks  
Water Planning  
Natural Heritage

Nevada SAI # E1997-053 Project: DEIS - Denton-Rawhide Mine Expansion Project

☒ Yes ☐ No Send more information on this project as it becomes available

## CLEARINGHOUSE NOTES:

Note those agencies with an asterisk (\*) should have already received a copy of this document directly from the Bureau of Land Management. If you did not receive a copy, please contact the Clearinghouse.

See Related SAI # 96300108.

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local area-wide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than December 30, 1996. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. If you have any questions, please contact Terri Rodler, Clearinghouse Environmental Advocate, at 687-6382, or Julie Butler, Clearinghouse Coordinator, at 687-6367.

## THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

☐ No comment on this project  
☐ Proposal supported as written  
☒ Additional information below

☐ Conference desired (See below)  
☐ Conditional support (See below)  
☐ Disapproval (Explain below)

THE ONLY WATER RIGHTS WHICH APPEAR TO BE EITHER WITHIN THE CLAIM BLOCKS OR UNDER THE CONTROL OF KENNEDY RANHIDE MINING COMPANY (KRMCO) ARE TWO PERMITS FOR KRMCO.

PERMITS 47706 AND 52444, UNCERTIFICATED, ARE FOR THE WATERS OF AN UNDERGROUND SOURCE FOR MINING, MILLING AND DOMESTIC IN THE AMOUNT OF 4.46 cfs NOT TO EXCEED A TOTAL COMBINED DUTY OF 1026 MILLION GALLONS ANNUALLY (MGA). THE PLACE OF USE IS PERMITTED FOR THE SEX NEW SECTION 08, T.13N., R.32E., MDB&M. PERMIT 47706 WAS ISSUED ON MARCH 1985 FOR A WELL IN THE SEX NEW SECTION 26, T.13N., R.32E., MDB&M AND PERMIT 52444 WAS ISSUED ON MARCH 8, 1983 FOR A WELL IN THE SEX NEW SECTION 26, T.13N., R.32E., MDB&M.

ANY USE OF WATER OUTSIDE OF THE SEX NEW SECTION 8, T.13N., R.32E., MDB&M WILL REQUIRE THAT A CHANGE IN THE PLACE OF USE BE PERMITTED BY THIS OFFICE.

ALL WELLS FOR WATER DEVELOPMENT, EXPLORATION, MONITORING OR OTHER USES MUST BE PLUGGED AND ABANDONED PURSUANT TO NAC CHAPTER 534 UPON CESSATION OF MINING ACTIVITIES UNLESS OTHERWISE AUTHORIZED BY THIS OFFICE.

EXPANSION OF THE SOLUTION POND MAY REQUIRE A OSM SAFETY PERMIT PURSUANT TO NRS CHAPTER 535.

Signature

Agency

Date

Response 9A

Comment noted.





